

Proposal Full View[Print](#)**Applicant Information**

Organization Name *

Tax ID

Proposal Name Lower San Juan Basin Groundwater Yield Enhancement Study *

Proposal Objective To evaluate feasible management approaches and brackish/saline groundwater recovery projects to enhance basin supply. *

Budget

Other Contribution	<input type="text" value="\$0.00"/>
Local Contribution	<input type="text" value="\$75,000.00"/>
Federal Contribution	<input type="text" value="\$0.00"/>
Inkind Contribution	<input type="text" value="\$0.00"/>
Amount Requested	<input type="text" value="\$250,000.00"/> *
Total Project Cost	<input type="text" value="\$325,000.00"/> *

Geographic Information

Latitude * DD(+/-) MM SS

Longitude * DD(+/-) MM SS

Longitude/Latitude Clarification 40 MM Location Lower San Juan Basin

County Orange *

Ground Water Basin San Juan Valley

Hydrologic Region South Coast

Watershed 52 4901 San Juan

Legislative Information

Assembly District 73rd Assembly District *

Senate District 34th Senate District *

US Congressional District District 48 (CA) *

Project Information

Project Name

Implementing Organization	Municipal Water District of Orange County
Secondary Implementing Organization	San Juan Basin Authority
Proposed Start Date	1/1/2013
Proposed End Date	12/31/2013
Project Scope	The scope of work focus is how to augment basin yield by management activities and recovery of brackish/saline groundwater
Project Description	The study will evaluate cost-effective methods to increase water supply from the Lower San Juan Basin. Key project work areas to be studied are alternatives to increase recovery of brackish/saline groundwater, conservation of stormwater by spreading, enhance basin storage utilization with radial wells, control invasive phreatophytes, salvage groundwater losses to the ocean, control seawater intrusion, recovery of desalter brines, and coordination with resource agencies on fishery/habitat management goals. MWDOC's new calibrated surface/groundwater model will be used in the analysis of minimum flows. The increased yield goal is 20,000 afy.
	As part of a continuing program to improve reliability to south orange county, an area that is 95% dependent on imported water to meet

Project Objective

demands, this study will help determine the feasibility for increasing recovery of stormwater and brackish/saline groundwater in the Lower San Juan Basin.

Project Benefits Information

Project Objective

Budget

Other Contribution	<input type="text" value="0"/>
Local Contribution	<input type="text" value="75000"/>
Federal Contribution	<input type="text" value="0"/>
Inkind Contribution	<input type="text" value="0"/>
Amount Requested	<input type="text" value="250000"/>
Total Project Cost	<input type="text" value="325000"/>

Geographic Information

Latitude DD(+/-) MM SS

Longitude DD(+/-) MM SS

Longitude/Latitude Clarification

Location

County Orange Ground Water Basin San Juan Valley Hydrologic Region South Coast WaterShed

52 4901 San Juan

Legislative Information

Assembly District	<input type="text" value="73rd Assembly District"/>
Senate District	<input type="text" value="34th Senate District"/>
US Congressional District	<input type="text" value="District 48 (CA)"/>

Section : Applicant Information and Question's Tab**APPLICANT INFORMATION AND QUESTION'S TAB****Q1. Applicant Information**

Provide the agency name, address, city, state, and zip code of the applicant submitting the application.

Municipal Water District of Orange County 18700 Ward Street P.O. Box 20895 Fountain Valley, CA 92728

Q2. Proposal Description:

Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP's BMO's.

This project is a feasibility study that will investigate cost-effective means for augmenting basin yield by various management activities and projects that can enhance yield and increase recovery of brackish/saline groundwater from the Lower San Juan Basin. The updated Groundwater Management Plan for the Lower Basin (previously adopted in 1994) is currently under preparation by the San Juan Basin Authority who is participating and supporting this grant application. As part of development work for the South Orange Coastal Ocean Desalination Project, which has just completed an 18-month extended pumping and pilot plant test using a Test Slant Well in the offshore portion of the groundwater basin to provide project feedwater (the first in California), a new basin groundwater model was developed. The basin has a network of groundwater monitoring wells managed by SJBA. The expected outcome from this grant application work will be to provide a management plan for optimizing the development of the water resources of Lower San Juan Basin. The specific study tasks are: Task 1. Increase Brackish/Saline Groundwater Recovery Task 2. Feasibility for Increased Conservation of Stormwater Task 3. Evaluate Radial/Collector Wells to Enhance Groundwater Yield/Storage Utilization Task 4. Arundo Removal Programs and Assessment of Water Yield Task 5. Effectiveness of Slant Wells to Salvage Groundwater Outflow Losses to the Ocean and to Control Seawater Intrusion Task 6. Recovery of Desalter Brines by the SOCOD Project Task 7. Review of Southern Steelhead Recovery and Habitat Restoration Plans Task 8. Project Management, Meetings, Presentations, and Report Preparation

Q3. Project Director:

Provide the name and details (including email) of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.

Karl W. Seckel, PE Assistant General Manager/Chief Engineer Municipal Water District of Orange County

Q4. Project Manager:

Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.

Richard B. Bell, PE Principal Engineer/Project Manager Municipal Water District of Orange County

Q5. Additional Information:

Based on the region's location, what is the applicable DWR region office (Northern, North Central, South Central, or Southern)? The following link can be used to view each DWR region office boundaries:

http://www.water.ca.gov/groundwater/groundwater_basics/gw_contacts_info.cfm

- 1) ☐ Northern Region
- 2) ☐ North Central Region
- 3) ☐ South Central Region
- 4) ☒ Southern Region

Q6. Additional Information:

Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.

The San Juan Basin Authority, a co-sponsor and participant in this grant application and feasibility study is currently in the process of completing its updated GWMP. This \$400,000 effort is being supplemented by the Municipal Water District of Orange County's \$500,000 development of a surface/groundwater flow and solute transport model for the basin. The updated GWMP is being prepared for SJBA by Wildermuth Environmental and the Groundwater Model is being prepared for MWDOC by Geoscience Support Services. All work efforts are being coordinated. The GWMP work commenced in FY 10/11 and is scheduled for adoption in FY12/13.

Q7. Additional Information:

Provide a list of documents that support and indicate collaboration with other local public agencies with regard to the management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).

The San Juan Basin Authority is a JPA consisting of four agencies: Santa Margarita Water District, Moulton Niguel Water District, South Coast Water District and the City of San Juan Capistrano, the overlying water providers for the basin. The Municipal Water District of Orange County is a wholesale and regional water management agency and member agency of Metropolitan Water District of Southern California. MWDOC is managing the development of the South Orange Coastal Ocean Desalination (SOCOD) Project with its five participating agencies: Moulton Niguel Water District, South Coast Water District, City of San Juan Capistrano, City of San Clemente and the Laguna Beach County Water District. The San Juan Basin Authority was formed on November 22, 1971 pursuant to Article I, Chapter 5, Division 7, Title 1 of the Calif Gov't Code. The San Juan Basin Authority Projects Agreement was entered into on February 5, 1991 to carry out the purpose of the SJBA. Water rights are held by SJBA up to 10,702 afy and by SCWD up to 1,300 afy. Various other agreements amongst the parties exist and support the cooperative development and management of the basin. MWDOC and the five participating agencies to the SOCOD Project entered into a MOU for the purposes of investigating the feasibility of developing an ocean desalination project which would integrate its operations by use of a slant wellfield to draw in ocean water and capture groundwater losses to the ocean and to control seawater intrusion by development of an extraction trough across the mouth of San Juan Creek. A letter from SJBA is attached to this grant application indicating the lead for this effort by MWDOC. MWDOC was formed in 1951 under the Municipal Water District Act. MWDOC is on the Executive and Management Committee for the South Orange County Integrated Regional Watershed Management Plan and works closely with Orange County Watersheds.

Q8. Additional Information

Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no "Other Contributions" Please answer this question with, "No Other Contributions".

In kind services will be provided by MWDOC and the SJBA for this work. Ongoing work for the development of the comprehensive surface/groundwater flow and solute transport model by MWDOC for the Lower San Juan Basin is not being claimed as a contribution under this work as the modeling work is expected to be completed this fall, before funds from this grant application would be available. The GWMP and annual Integrated Environmental Monitoring Program (groundwater extractions, groundwater level monitoring and riparian habitat monitoring) will be completed in FY12/13. The Integrated Environmental Monitoring Program work is part of the local contribution to this grant application study.

Q9. Eligibility:

List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.

Municipal Water District of Orange County

Q10. Eligibility:

Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.

Yes.

Q11. Completeness Check:

Have all of the fields in the application been completed?

Yes

Q.11. Completeness Check (cont)

If no, please explain. If yes, answer this question with "NA".

NA

Section : Application Attachments Tab

APPLICATION ATTACHMENTS TAB

Attachment 1. Authorizing Documentation

Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments:

Att1_LGA12_MWDOC_AuthDoc_2ofTotal3.pdf,Att1_LGA12_MWDOC_AuthDoc_3ofTotal3.pdf,Att1_LGA12_MWDOC_AuthDoc_1ofTotal3.pdf

Attachment 2. Eligible Applicant Documentation

Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att2_LGA12_MWDOC_EligDoc_1ofTotal1.pdf

Attachment 3. Status of GWMP

Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att3_LGA12_MWDOC_GWMP_1ofTotal2.pdf,Att3_LGA12_MWDOC_GWMP_2ofTotal2.pdf

Attachment 4. Project Description

Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att4_LGA12_MWDOC_ProjD_1ofTotal1.pdf

Attachment 5. Work Plan

Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att5_LGA12_MWDOC_WrkPln_1ofTotal1.pdf

Attachment 6. Budget

Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att6_LGA12_MWDOC_BUDGET_1ofTotal1.pdf

Attachment 7. Schedule

Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att7_LGA12_MWDOC_SCHED_1ofTotal1.pdf

Attachment 8. Quality Assurance

Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att8_LGA12_MWDOC_QA_1ofTotal1.pdf

Attachment 9. Past Performance

Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att9_LGA12_MWDOC_PERFORM_1ofTotal1.pdf

Attachment 10. AB1420 and Water Meter Implementation Compliance

Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att10_LGA12_MWDOC_1420_1ofTotal1.pdf
